

SYSTEM AND METHOD FOR FREQUENCY TRANSLATION
WITH HARMONIC SUPPRESSION USING MIXER STAGES

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ABSTRACT OF THE DISCLOSURE

10 A circuit for frequency translating a radio frequency signal comprises a plurality of
mixer stages, each stage associated with a particular range of frequencies of a radio
frequency signal. The circuit further comprises a switching circuit that communicates the
radio frequency signal to a selected one of the plurality of mixer stages in response to a
control signal. The selected mixer stage comprises a phase generation circuit that
generates a plurality of phase signals, and at least one mixer that combines the radio
frequency signal with one of the plurality of phase signals to generate at least a portion of
an intermediate frequency signal.

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